UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,972	12/27/2001	Ching-Chiang Liu	LIUC3018/EM	1791

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BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314

EXAMINER
NGUYEN, MIKE

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO 90C (Rev 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _13 October 2004_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-7_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-7_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage

        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail. Date _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Notices & Remarks

1.   Applicant's amendment 10/13/2004 in response to Examiner's Office Action has been

reviewed and the following rejections now apply.

2.   Claims 1-7 are pending for the examination.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Wu et al. (U.S.

Pat. No. 6,810,436 B2).

As to claim 1, Wu teaches a wireless receiving method implementing in a wireless

receiving apparatus (fig. 1 wireless receiving device 1) having a single MCU (micro-processor

circuit 13), wherein after the single MCU has sequentially received signals having different

frequencies transmitted from a plurality of peripheral devices in multi-segment multi-task data

processing mode and finished a process for identifying the received signals (col. 2 lines 44-50

and col. 2 line 66 to col. 3 line 17), the single MCU performs the steps of:

(a) reading a predetermined processing procedure with respect to a first signal from a

memory (col. 3 lines 19-67);

(b) performing a predetermined process with respect to a first signal based on the predetermined processing procedure (col. 3 lines 19-67);

(c) storing an index of a last finished step of said predetermined process with respect to the first signal in the memory, after at least one step of the predetermined process has been performed with respect to the first signal (col. 3 lines 19-67);

(d) reading the predetermined processing procedure with respect to a second signal from the memory (col. 3 lines 19-67);

(e) performing a predetermined process with respect to the second signal based on the predetermined processing procedure (col. 3 lines 19-67);

(f) storing an index of a last finished step of said predetermined process with respect to the second signal in the memory, after at least one step of the predetermined process has been performed with respect to the second signal (col. 3 lines 19-67);

(g) determining whether all predetermined processes have been performed on the signals based on the predetermined processing procedure with respect to the signals (col. 3 lines 30-44); and

(h) sending all of the processed signals to a computer for processing based on data contained in the signals if a result of the determination in step (g) is positive, and otherwise looping back to step (a) (col. 3 lines 50-51).

As to claim 2, Wu teaches the method of claim 1, further comprising the steps of:

(i) reading a signal conversion table stored in the memory, after the signal has been received (col. 3 lines 25-27 and col. lines 52-63);

(j) determining whether a type of the receive signal has a corresponding type of a signal recorded in the conversion table (col. 3 lines 25-44);

(k) determining whether a length of the received signal is correct based on data of a corresponding signal recorded in the conversion table, if a result of the determination in step (j) is positive (col. 3 lines 25-44); and

(i) decoding the signal based on a corresponding decoding procedure recorded in the conversion table if a result of the determination in step (k) is positive, and sequentially reading components of the decode signal, and sending all of the processed signals to the computer so that a CPU (central processing unit) of the computer is capable of processing based on data contained in the signal (col. 3 lines 25-52).

As to claims 3 and 4, Wu the method of claim 2, further comprising the step of if the result of the determination in step (k) is negative, discarding the signal so as to continue to receive signals (col. 3 lines 30-44).

As to claim 5, Wu teaches the method of claim 2, wherein the processing based on data contained in the signal comprises a first processing with respect to a wireless peripheral device corresponding to the signal (col. 3 lines 28-44).

As to claim 6, Wu teaches the method of claim 2, wherein the processing based on data contained in the signal comprises a second processing with respect to an instruction or data corresponding to the signal (col. 3 lines 28-44).

As to claim 7, Wu teaches a wireless receiving apparatus (fig. 1 wireless receiving device 1) comprising:

a signal receiving circuit (wireless receiving circuit 11) for receiving signals having different frequencies from a plurality of peripheral devices and classifying the signals based on the frequencies (col. 2 lines 27-32);

a memory for storing data and conversion table which is capable of recording types, processing procedures, and decoding procedures of the plurality of signals (col. 2 lines 66 to col. 3 lines 17); and

an MCU (microprocessor control unit) (micro-processor circuit 13) electrically coupled to the signal receiving circuit, the memory, and a computer (col. 2 lines 23-26) respectively so that the MCU is capable of receiving the signals from the peripheral device, wherein the received signals are send to the MCU for identification (col. 2 lines 44-50), and by utilizing a multi-segment multi-task data processing the MCU is capable of reading the corresponding processing procedure and decoding procedure from the memory, performing a predetermined process with respect to a first signal based on the processing procedure for the first signal after at least one step has been performed with respect to the first signal, storing in the memory an index of a last finished step performed with respect to the first signal (col. 3 lines 19-67), performing a predetermined process with respect to a second signal based on the processing procedure for the second signal after at least one step has been performed with respect to the second signal, storing in the memory an index of a last finished step performed with respect to the second signal, and repeating until a set of steps have been performed with respect to the first and the second signals (col. 3 lines 19-67), the MCU continuing to perform steps immediately by following the indices

of previous set of steps with are stored in the memory for carrying out a next set of steps,

repeating until all of the signals have been processed, and finally sending all of the processed

signals to the computer for processing based on data contained in the signals (col. 3 lines 50-51).

Response to Arguments

5.   Applicant's arguments with respect to claims 1-7 have been considered but are moot in

view of the new ground(s) of rejection.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mike Nguyen whose telephone number is 571 272-4153. The

examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey Gaffin can be reached on 571 272-4146. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mike Nguyen
Patent Examiner
Group Art Unit 2182
01/03/2005

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100